

BEFORE THE POSTAL RATE COMMISSION WASHINGTON, D.C. 20268-0001

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MAILING ONLINE SERVICE

Docket No. MC98-1

RESPONSE OF UNITED STATES POSTAL SERVICE WITNESS STIREWALT TO INTERROGATORIES OF THE OFFICE OF THE CONSUMER ADVOCATE (OCA/USPS-T3—68–74)

The United States Postal Service hereby provides the responses of witness Stirewalt to the following interrogatories of the Office of the Consumer Advocate:

OCA/USPS-T3-68-74, filed on October 14, 1998.

Each interrogatory is stated verbatim and is followed by the response.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorneys:

Daniel J. Foucheaux, Jr. Chief Counsel, Ratemaking

David H. Rubin

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 (202) 268–2986; Fax –5402 October 26, 1998



OCA/USPS-T3-68. Witness Garvey testifies in USPS-T-1 at 3 that the Postal Service will accept Portable Document Format (PDF) from customers (n. 3) and will use PDF to transmit electronic document files from the mail processing center to digital printers (lines 4-5).

Please review the document properties of a PDF file entitled "Flier", included on a diskette filed by OCA as OCA-LR-1, MC98-1. (A copy of the OCA-LR-1 diskette was submitted to the Postal Service for your review.) The file is a simulation of a flier that a veterinarian might send to a customer, by means of Mailing Online (MOL), to remind the customer that a pet is due for an appointment. A hard copy of the simulated notice generated by the PDF file in Acrobat Reader has been attached as Attachment 1.

- a. Please confirm that this type of file would be acceptable for MOL (or redirect this interrogatory to a witness who is able to confirm or deny).
- b. If you are able to confirm that the file is acceptable for MOL, then review the number of bytes required to create the image and text of the submitted notice. Isn't it correct that this file is approximately 358 kilobytes (KB) in size?
- c. If you are not able to confirm that the file is acceptable for MOL, then explain why it is not acceptable (or redirect this question to a witness who is able to provide the explanation).
- d. Isn't it correct that you have assumed that customers accessing MOL would typically submit word processing/desk top publishing documents whose electronic pages would be 5.02KB per page in size (USPS-LR-1/MC98-1 at 6)?
- e. If part b. was answered in the affirmative, i.e., that the 358 KB PDF file is acceptable for MOL, then explain how you have taken into account the very large number of bytes consumed by a file such as the "Flier" file in estimating the capacity requirements for the "Telecommunications Internet Connection, Customers Accessing Mailing Online."
- f. Isn't it correct that, in the note explaining your choice of 5.02 KB as the average number of bytes per electronic page, you have limited your discussion to an observation concerning a Microsoft Word file containing several paragraphs of plain text and noted that such a file consisting of several paragraphs could require up to 10 KB?
- g. What were your specific assumptions about desktop publishing file size?
- h. Haven't you seriously underestimated the capacity required for a range of graphics-intensive and desktop publishing documents? Explain your answer.

- a. Not confirmed. I have confirmed with the Mailing Online software developers that the Mailing Online software does not accept files in PDF format. I understand from witness Garvey, however, that acceptance in PDF format is planned for the future.
- b. Not applicable.
- c. Refer to my response to part (a) above. PDF format files are not among those accepted by the Mailing Online software.

- d. The 5020 bytes per page is a reasonable assumption for estimating the size of an electronic page, given the specific assumptions I describe in my response to part (g) below.
- e. Not applicable.
- f. Yes.
- g. Given that Mailing Online accepts files in a number of formats, I assumed, specifically, that: 1) the characteristics of each file format would differ, including the electronic page size or physical file size, in bytes, required to represent any given information set; 2) the content of user-submitted jobs to Mailing Online service will vary greatly from one document to the next in terms of text font, styles, and graphics; 3) of the set of word processing and desktop publishing formats that users would submit, a significant number, even a majority, would be submitted in the format of the most popular word processing software, Microsoft Word; and 4) most, although not all of the content of Mailing Online documents, would be in text.
- h. Refer to my response to parts (a) through (g) above. The existence of a PDF format file approximately 358 kilobytes (KB) in size does not indicate that I seriously underestimated capacity required for documents submitted to Mailing Online.

OCA/USPS-T3-69. Please review a second file, entitled "One_Word_File," which consists of the single word "Postal" and which has been copied onto the OCA-LR-1 diskette. (Hard copy has been attached as Attachment 2).

- a. Isn't it correct that this Microsoft Word document is 11KB in size?
- b. Isn't it correct that this 11KB size is more than twice the amount per page you assumed at page 6 of Attachment 1?
- c. How have you taken such a one-word, one-page document of 11KB explicitly into account? Please explain your answer.

- a. Yes.
- b. Yes, but the comparison is misleading because it is being made between a physical file size and an electronic page size. The physical file size is equivalent to the entire document. To arrive at a comparable figure using my Attachment 1, for average number of bytes per document, the average number of bytes per page (5020) is multiplied by the average number of pages per document (3.2), yielding 16064 bytes per document.
- c. I did not take a one-word, one-page document into account. I did not expect that a Mailing Online customer would send such a document. The number of words in an electronic page does not directly correspond to the physical file size. In the file "LR14fil1" of USPS-LR-14, a one page document with a full page of text is approximately 14K bytes in size. In the file "LR14fil2" of USPS-LR-14, a Microsoft Word document with slightly more than three pages of text (four electronic pages) has a physical file size of 15K bytes in size. The size of a Microsoft Word document thus does not increase incrementally by 11K bytes in size for each electronic page.

OCA/USPS-T3-70. Please define an electronic "page" as you have used that term in USPS-LR-1/MC98-1 at 6. Did you assume that the bytes of information contained on such a page would result in

- a. 1
- b. 2
- c. 3
- d. or 4 impressions? Please explain.

RESPONSE

As I suggested in response to OCA/USPS-T3-69, electronic pages represent the number of breaks between logical pages in an electronic word processing document. For example, the file "LR14fil2" of USPS-LR-14 crosses three page breaks. Each time a page break is crossed, an additional electronic page is counted.

Refer to witness Seckar's response to OCA/USPS-T3-26. I made no assumptions as to how many impressions would be contained in an electronic page. I did not use a number of impressions to develop my information systems cost estimates.

OCA/USPS-T3-71. Please refer to USPS-LR-1/MC98-1, Attachment 1 at 6, at the line that reads "Number of Bytes Per Page Word Processing/Desk Top Publishing."

- a. Please confirm that the number 5,020, "Number of Bytes Per Page Word Processing/Desk Top Publishing," is based upon the assumption that files consist only of plain text, and do not include the presence of graphics. If you do not confirm, please explain.
- b. Please confirm that there is no limitation on the size (in bytes) of files accepted from customers by Mailing Online (as long as the page limitation is not exceeded). If you are unable to confirm, then provide an explanation or redirect the question to a witness who can provide the explanation.

- a. Not confirmed. While no specific number of bytes or percentage of bytes reserved for graphics is taken into account in the number 5020, I did not assume that files contain only plain text.
- b. Confirmed.

OCA/USPS-T3-72. Please refer to USPS-LR-1/MC98-1, Attachment 1 at 7.

- a. Please confirm that Mailing Online will accept files from customers in PDF and Postscript format. If you do not confirm, please explain.
- b. Please confirm that the San Mateo processing center processes files received from customers in PDF format. If you do not confirm, please explain.
- c. Please confirm that the San Mateo processing center transmits all print jobs to the print site in Postscript format. If you do not confirm, please explain.
- d. Please identify at what point in processing by the San Mateo processing center customer files will be converted from PDF format to Postscript.
- e. Please confirm that the print sites will receive and process the print jobs received from the San Mateo processing center in Postscript format. If you do not confirm, please explain.

- a. Refer to my response to OCA/USPS-T3-67(a).
- b. Not confirmed. Refer to my response to OCA/USPS-T3-67(a).
- Not confirmed. The San Mateo processing center forwards all print jobs to the print site in PDF format.
- d. There are no customer files in PDF format. Refer to my response to OCA/USPS-T3-67(a).
- e. Not confirmed. The print sites will receive and process the print jobs sent from the San Mateo processing center in PDF format.

OCA/USPS-T3-73. Please refer to USPS-LR-1/MC98-1, Attachment 1 at 7.

- a. Please identify at what point in processing by the San Mateo processing center print jobs will be compressed for transmission to the print sites.
- b. Please confirm that the San Mateo processing center only compresses files for the purpose of transmitting print jobs to print sites. If you do not confirm, please explain.

- a. Compression of print jobs takes place prior to placement on the FTP server housed at the San Mateo processing center. The compressed jobs are then transmitted to the print sites.
- b. Confirmed.

OCA/USPS-T3-74. Please refer to USPS-LR-1/MC98-1, Attachment 1 at 7, at the line reading "Average Bytes Per Page in Postscript format." In the "SOURCE" column it states, "Estimate based on observation of the file sizes generated by the Mailing Online software during the pilot."

- a. How many observations of file sizes were made during the pilot?
- b. Please describe the process of observation and identify the Postal employees or other personnel who made the observations.
- c. Please confirm that the observation of files did not constitute a random sample. If you do not confirm, please explain.
- d. Please confirm that the figure 30,720, "Average Bytes Per Page in Postscript format," does not constitute a sample mean (\bar{x}) or population mean (μ) . If you do not confirm, please explain.
- e. Please provide a tabulation showing the total number of files processed during the pilot by the number of pages and byte size in Postscript format.

- a. None, since my observations took place during the final testing of the software before the commencement of the Operations Test. I observed several files at that time.
- b. I personally inspected several files created during the testing of the Mailing Online system prior to commencement of the Operations Test.
- c. Confirmed.
- d. Confirmed.
- e. Postscript format files are not retained in the Mailing Online system. A tabulation showing the total number of files processed during the pilot by the number of pages and byte size in Postscript format cannot be developed.

DECLARATION

I, Daniel Stirewalt, declare under penalty of perjury that the foregoing answers are true and correct, to the best of my knowledge, information, and belief.

dans Donas

Dated: 10/26/98

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing document upon all participants of record in this proceeding in accordance with section 12 of the Rules of Practice.

David H. Rubin

475 L'Enfant Plaza West, S.W. Washington, D.C. 20260–1137 October 26, 1998